

**ABSTRACT**

A planar carbon segment commutator includes a commutator base of insulating material. The base has a rotational axis and front and rear surfaces extending, at least in part, transversely to the rotational axis. A plurality of apertures extends through the base. The commutator also includes a plurality of commutator terminals, each terminal having a terminal portion and a contact portion. Each contact portion extends through one of the apertures and is bent to lie against or in close proximity to the front surface of the base. Each terminal portion has two cutting edges for cutting insulation on a connector portion of a winding and a slot which, in use, straddles and grips the connector portion. The commutator also includes a plurality of carbon segments formed on the front surface of the base and over the contact portions, respectively, of the terminals and a housing having a plurality of housing recesses for receiving the terminal portions.